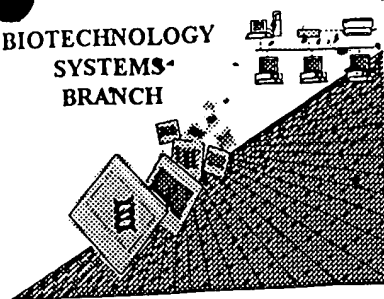


RAW SEQUENCE LISTING ERROR REPORT

BIOTECHNOLOGY
SYSTEMS
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/974619
Source: OIE
Date Processed by STIC: 10/30/01

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
<http://www.uspto.gov/web/offices/pac/checker>

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/974,619

DATE: 10/30/2001
 TIME: 11:27:52

Input Set : A:\1340-1-034N.ST25.txt
 Output Set: N:\CRF3\10302001\I974619.raw

```

170 <400> SEQUENCE: 17
171 gcctaaagac cttcgatttg tg                                22
174 <210> SEQ ID NO: 18
175 <211> LENGTH: 22
176 <212> TYPE: DNA
C--> 177 <213> ORGANISM: Artificial
W--> 179 <220> FEATURE:
W--> 179 <223> OTHER INFORMATION:
179 <400> SEQUENCE: 18
180 cattccttac cccagttttt ga                                22
183 <210> SEQ ID NO: 19
184 <211> LENGTH: 24
185 <212> TYPE: DNA
C--> 186 <213> ORGANISM: Artificial
W--> 188 <220> FEATURE:
W--> 188 <223> OTHER INFORMATION:
188 <400> SEQUENCE: 19
189 agtcctctca agtctaatag caac                                24
192 <210> SEQ ID NO: 20
193 <211> LENGTH: 23
194 <212> TYPE: DNA
C--> 195 <213> ORGANISM: Artificial
W--> 197 <220> FEATURE:
W--> 197 <223> OTHER INFORMATION:
197 <400> SEQUENCE: 20
198 gaaggacagc atagatcctt aca                                23
201 <210> SEQ ID NO: 21
202 <211> LENGTH: 22
203 <212> TYPE: DNA
C--> 204 <213> ORGANISM: Artificial
W--> 206 <220> FEATURE:
W--> 206 <223> OTHER INFORMATION:
206 <400> SEQUENCE: 21
207 cagggtctct ggaaatttga ca                                22
210 <210> SEQ ID NO: 22
211 <211> LENGTH: 22
212 <212> TYPE: DNA
C--> 213 <213> ORGANISM: Artificial
W--> 215 <220> FEATURE:
W--> 215 <223> OTHER INFORMATION:
215 <400> SEQUENCE: 22
216 tcattctcca cttagggttc ca                                22
219 <210> SEQ ID NO: 23
220 <211> LENGTH: 22
221 <212> TYPE: DNA
C--> 222 <213> ORGANISM: Artificial
W--> 224 <220> FEATURE:
W--> 224 <223> OTHER INFORMATION:
224 <400> SEQUENCE: 23

```

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/974,619

DATE: 10/30/2001
 TIME: 11:27:52

Input Set : A:\1340-1-034N.ST25.txt
 Output Set: N:\CRF3\10302001\I974619.raw

```

225 cagcatggat gtgattactg gc                                22
228 <210> SEQ ID NO: 24
229 <211> LENGTH: 21
230 <212> TYPE: DNA
C--> 231 <213> ORGANISM: Artificial
W--> 233 <220> FEATURE:
W--> 233 <223> OTHER INFORMATION:
233 <400> SEQUENCE: 24
234 cctgccttca atttttcaact g                                21
237 <210> SEQ ID NO: 25
238 <211> LENGTH: 20
239 <212> TYPE: DNA
C--> 240 <213> ORGANISM: Artificial
W--> 242 <220> FEATURE:
W--> 242 <223> OTHER INFORMATION:
242 <400> SEQUENCE: 25
243 gcaatgtagg aaggagggct                                20
246 <210> SEQ ID NO: 26
247 <211> LENGTH: 20
248 <212> TYPE: DNA
C--> 249 <213> ORGANISM: Artificial
W--> 251 <220> FEATURE:
W--> 251 <223> OTHER INFORMATION:
251 <400> SEQUENCE: 26
252 taatattctt ttgataatg                                20
255 <210> SEQ ID NO: 27
256 <211> LENGTH: 22
257 <212> TYPE: DNA
C--> 258 <213> ORGANISM: Artificial
W--> 260 <220> FEATURE:
W--> 260 <223> OTHER INFORMATION:
260 <400> SEQUENCE: 27
261 cattctttca ctagcactgt tc                                22
264 <210> SEQ ID NO: 28
265 <211> LENGTH: 20
266 <212> TYPE: DNA
C--> 267 <213> ORGANISM: Artificial
W--> 269 <220> FEATURE:
W--> 269 <223> OTHER INFORMATION:
269 <400> SEQUENCE: 28
270 caacaaaaac cggcaaactg                                20
273 <210> SEQ ID NO: 29
274 <211> LENGTH: 20
275 <212> TYPE: DNA
C--> 276 <213> ORGANISM: Artificial
W--> 278 <220> FEATURE:
W--> 278 <223> OTHER INFORMATION:
278 <400> SEQUENCE: 29
279 aggattttca gacttaacac                                20

```


VERIFICATION SUMMARY
PATENT APPLICATION: US/09/974,619

DATE: 10/30/2001
TIME: 11:27:54

Input Set : A:\1340-1-034N.ST25.txt
Output Set: N:\CRF3\10302001\I974619.raw

L:161 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:168 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:17
L:170 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:170 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:177 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:18
L:179 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:179 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:186 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:19
L:188 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:188 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:195 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:20
L:197 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:197 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:204 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:21
L:206 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:206 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:213 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:22
L:215 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:215 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:222 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:23
L:224 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:224 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:231 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:24
L:233 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:233 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:240 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:25
L:242 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:242 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:249 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:26
L:258 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:27
L:267 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:28
L:276 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:29
L:285 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:30
L:294 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:31
L:303 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:32
L:312 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:33
L:321 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:34
L:330 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:35
L:339 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:36